

SCHEDULING AND QUEUE SERVICING IN A
SATELLITE TERMINAL FOR BANDWIDTH ALLOCATIONS
IN A BROADBAND SATELLITE COMMUNICATIONS SYSTEM

ABSTRACT OF THE DISCLOSURE

[124] An approach for scheduling packets within a terminal used in a satellite communications system is disclosed. A hub, in conjunction with a satellite, controls bandwidth allocations to a plurality of terminals, which are configured to issue bandwidth allocation requests to the satellite. Each of the terminals comprises a plurality of queues that are configured to store the packets; these queues are prioritized. A bandwidth-on-demand control logic prepares a schedule plan for transmitting the stored packets based upon current bandwidth allocations and the prioritization of the queues. The current bandwidth allocations are based upon prior bandwidth allocation and the stored packets. The schedule plan assigns the stored packets to packet transmission opportunities associated with the current bandwidth allocations.